

# The AI autonomous serving robot

### developed by Rainbow Robotics

Rainbow Robotics' serving robot boasts of high precision in positioning and stable performance compared to other companies thanks to localization of core components and self-developed software. Additionally, it is easy even for beginners to set up and operate with its interactive UI.



#### **High positioning precision**

By using Grid-Free SLAM, it offers higher positioning precision compared to other companies.



#### 3-Sided Tray Open Structure

A horizontal arrangement with 3 sides opened makes tray attachment and detachment easy and increases work speed.



#### Al autonomous driving

It accurately determines the position without attaching markers.



#### **Customization is possible**

Tray positions can be adjusted to suit workability, and up to five levels can be added.



#### **Serving Point Management**

Intuitive and easy serving management by designating a serving location and a group, such as main hall, group table, alias, etc.



# Interworking with call bells for staff

More efficient serving by linking call bells.





## **Specification**

Basic Specifications	
Model name	RBM-SRV
Main body size (width $ imes$ length $ imes$ height)	510 x 510 x 1250 mm
Loading capacity	Max. 30 kg (about 10 kg per shelf)
Shelf size (width x length)	510 x 380 mm
Display	10.1 inches / (1280x800)
Weight	about 50kg
Number of shelves	2 + 1 (Expandable)
Sensor	2D LiDAR x 1, 3D camera x2
Network	Wi-Fi

Battery	
Battery capacity	15,000 mAh (48V)
Continuous driving time	12 hours
Battery charging time	3 hours and 30 minutes
Charging type	Wired AC adaptor included

Driving	
Driving mode	Serving mode/Collecting mode
Driving width	700 mm
Driving speed	Up to 1.0 m/s (Adjustable)
Emergency stop	EMO Switch

Others	
Sound volume control	Separate control of background music and guidance voice
Charging recognition	Recognition of charging adaptor connection
Shelf position adjustment	Adjustable
Tray attachment/detachment	Use off-the-shelf trays

 $<sup>\</sup>ensuremath{\,\%\,}$  Some specifications may be subject to change for performance improvement.

### **Areas of application**











Restaurants

Internet cafes

Marts